

.....

Organisation: Filled [AI Powered Advertising.]

Project: Web API to simulate the behaviour of audio file server.

Done by: Yash Viroja

.....

Technologies: Python with flask server, MongoDB

Tools: Visual Studio, Postman, MongoDB Compass

Python libraries: Flask, Mongo Engine

Files: 1.) serveren.py (Contain python flask server and MongoDB database setup.)

2.) test.py (Contains python unittest module and various test cases to test the API.)

.....

Database structure:

Main document: audio_metadata (Contain 3 sub document)

Sub document: (Contain audio files metadata as per document classification.)

- I. song
- II. podcast
- III. audiobook

Metadata Structure in sub document:

I. Song: ex.

```
{ "_id": {"$oid": "602e247678db1aa1332e9d22"},      ## Autogenerated Document ID
  "id": {"$numberLong": "12123232000"},          ## Song Metadata
  "songName": "I wanna grow old with you.",
  "songDuration": 220,
  "songUpload": {"$date": "2021-02-18T13:55:26.993Z"}
}
```

II. Podcast: ex.

```
{ "_id": {"$oid": "602e1cee78db1aa1332e9d1f"},      ## Autogenerated Document ID
  "id": {"$numberLong": "12123232000"},          ## Podcast Metadata
  "podcastName": "Ummid",
  "podcastDuration": 25815,
  "podcastUpload": {"$date": "2021-02-18T13:23:18.251Z"},
  "podcastHost": "Zakir khan",
  "podcastParticipants": ["Yash", "raj", "DK", "DC"]
}
```

III. Audiobook: ex.

```
{ "_id": {"$oid": "602e1bfc78db1aa1332e9d1b"},      ## Autogenerated Document ID
  "id": {"$numberLong": "12123232000"},          ## Podcast Metadata
  "audiobookName": "The Alchemist",
  "audiobookAuthor": "polo cohelo",
  "audiobookUpload": {"$date": "2021-02-18T13:19:16.161Z"},
  "audiobookNarrator":
    "Yash", "audiobookDuration": 20550
}
```

API basics:

Create API:- endpoint: `</audiometa>` methods: ['POST']

[**Submit input Jason file as shown below, along with POST request to add it into database.

** No need to add upload time as it is by default given as a current time.]

```
Formatexample:- {"audioFileType": "Song",
                  "audioFileMetadata": {"Id": "12123232000",
                                         "songName": "I wanna grow old with you"
                                         "songDuration": "220"
                                         }
                  }
```

Delete API:- endpoint: `<audioFileType>/<audioFileID>` methods: ['DELETE']

[**For <audioFileType> enter any of {Song, Podcast, Audiobook}.

** For <audioFileID> enter Id of already present audio file which you want to delete.]

Update API:- endpoint: `<audioFileType>/<audioFileID>` methods: ['PUT']

[**For <audioFileType> enter any of {Song, Podcast, Audiobook}.

** For <audioFileID> enter Id of already present audio file which you want to update.

** Also input Jason file as shown below with only parameters which you need to update, along with PUT request.]

Formatexample:- If need to update podcast name and podcast participant from podcast with Id 12123232001,

```
{
    "podcastName": "Still Porocessing",
    "podcastParticipants": ["Yash", "raj", "DK", "DC"]
}
```

Get API:- endpoint: `<audioFileType>/<audioFileID>` methods: ['GET']

[**For <audioFileType> enter any of {Song, Podcast, Audiobook}.

** For <audioFileID> enter Id of already present audio file which you want to get.

** If need all files of single format just enter <audioFileType>.]